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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MACCORD MASON PLLC
300 N. GREENE STREET, SUITE 1600
P. O. BOX 2974
GREENSBORO, NC 27402

EXAMINER

DEUBLE, MARK A

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/824,198	Applicant(s) BENEDICT ET AL.	
	Examiner Mark A. Deuble	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 76. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 22, 27, and 51 all recite "a cantilevered conveying belt" and at least claims 22, 27, and 51 also recite "a cantilevered deck." While the belt and deck are cantilevered when the support arm 42 is swung down to the position illustrated in Fig. 4 to enable the conveyor belts to be changed, the belt and the deck are not cantilevered during the

normal operation of the conveyor because the arm 42 supports the distal end of the deck and conveyor belt when operating. Therefore it is misleading to characterize the belt and deck as cantilevered resulting in ambiguity about the scope of the present invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,759,594 to Kleboe et al. as in the Office action of May 31, 2005.

The belt tension assembly capable of being used for a conveyor having at least one conveyor belt and a pair of opposed rollers disclosed by Kleboe et al. includes all the claimed features and in particular includes: a roller support 62 connected to a roller 72; a roller support rod 76 for movably connecting the roller support to the frame; a roller support rod spring 82 between the support rod and the frame 54; a spring adjustment assembly 80; and the spring 82 being a compression spring.

In response to this rejection, Applicant argues that Kleboe does not show an assembly that comprises “a roller support rod for movably connecting said roller support to said cantilevered deck, and a roller support rod spring between said roller support rod and said cantilevered deck. The examiner respectfully disagrees. As is discussed above, the belt tension assembly of Kleboe includes a support rod that is capable of being movably connecting the roller support to a cantilevered deck so that the spring would be between the roller support

rod and the cantilevered deck as required by the claim. It should be noted further that the claim is directed to the tension assembly per se and not to the combination of a tension assembly and a cantilevered conveying belt with a cantilevered deck so that no cantilevered conveyor or deck need be shown in Kleboe unless the preamble of claim 22 is deemed to breathe life into the claim. The examiner does not believe the preamble breathes life into the claim.

6. Claims 51 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Cotter et al.

Cotter et al. shows a cantilevered conveying belt assembly 210 comprising a cantilevered deck 214. The cantilevered deck includes a first belt 230a and a second belt 230g that is shorter than the first belt. The shorter belt is positioned on the cantilevered deck so that one end wraps around the roller 224 proximal to the unsupported end of the cantilevered deck. While Cotter et al. does not discuss removal and replacement of the belts, the either the first or second belt could be replaced without removal of the other belt by cutting one of the belts to remove it and then replacing it with a strip of belt material and then attaching the ends of the belt together once on the deck. Thus Cotter et al. shows all the structure required by claims 51 and 55.

7. Claims 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Nystrom (U.S. Patent no. 2,764,031).

Nystrom shows a chain conveyor tension assembly 9 capable of being attached to a cantilevered deck of a conveyor. The assembly includes a roller support 3, a roller support rod 10 for movably connecting the roller support to a deck, a compression spring 17 between the roller support rod and the deck, and a spring adjustment assembly. The spring adjustment assembly includes a first fixed spring stop 14, a second moveable spring stop 10, and an actuator

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for adjusting the position of the second moveable spring stop. The actuator includes a threaded rod 24, a sliding nut 23, and a spring drive 28 on one end of the threaded bolt. Thus Nystrom shows all the structure required by claims 22-25.

8. Claim 51 is rejected under 35 U.S.C. 102(b) as being anticipated by Del Rosso (U.S. Patent No. 4,564,077).

Del Rosso shows a cantilevered conveying belt 10 comprising a cantilevered deck formed by rollers 12/14, crow members 23, and plate 21.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been **obvious** at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 52 and 56 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cotter et al.

Cotter et al. shows generally all the structure required by the claims including a deck 214 with a plurality of tubes formed on the lower edges of the members 216 and 218 to receive bolts (see Fig. 10). However, while the members 216 and 218 resemble extruded members in cross section, Cotter et al. does not disclose how the tubes are formed on the members 216 and 218. However the Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature” than when a product is claimed in the conventional fashion. In re Fessmann, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product

appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983).

11. Claims 1-10, 12-13, 20-23, 27-35, 37-38, 45-47, and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotter et al. in view of Kleboe et al.

The conveyor system disclosed by Cotter et al. includes: **(claims 1, 27)** a cantilevered deck 214 having at least one conveyor belt 230; **(claims 2, 3, 28)** an upstream accumulator 112, 212 including a frame; at least one belt; at least one pair of opposed rollers and a motor; **(claims 4, 29)** an accumulator control system (column 8, line 64 thru column 9, line 27); **(claims 5, 30)** package presence detectors 124; **(claims 6, 31)** the accumulator control system including an interface to the primary conveyor (column 8, line 64 thru column 9, line 27); **(claims 7, 12, 32, 36)** the cantilevered deck including a members 216, 216 and a trapezoidal cantilevered deck comprised of rollers attached to the base 214; **(claims 8, 33)** the base being lazy L-shaped; **(claims 9, 10, 34, 35)** the base including a vertical support wall 216 including a horizontal deck (figure 10); and **(claims 20, 21, 45, 46)** the cantilevered frame including a belt drive 224.

Cotter et al. does not disclose a belt tension assembly attached to the conveyor frame. However, Kleboe et al. discloses the broad teaching of providing a conveyor, including a plurality of conveyor belts each having a pair of rollers, with a tension assembly including a roller support 62 connected to a roller 72; a roller support rod 76 for movably connecting the roller support to the frame; a roller support rod spring 82 between the support rod and the frame 54; a spring adjustment assembly 80; and the spring 82 being a compression spring. It would

have been obvious to one of ordinary skill in the art to provide the cantilevered conveyor disclosed by Cotter et al. with a tension assembly to facilitate keeping the belts under proper tension and allowing for easy replacement of individual belts as taught by Kleboe et al. When this is done, the resulting apparatus would have a belt tension assembly attached to the cantilevered deck via the members 216 and 218 with the tubes formed thereon. Thus Cotter et al. as modified in view of Kleboe would have all the structure required by claims 1-10, 12-13, 20-23 (including all the structure required by claims 22-23 if the preamble breathes life into claim 22), 27-35, 37-38, 45-47 and 53-54.

In response to this rejection, applicant argues that cotter et al does not disclose a cantilevered conveyor. The examiner respectfully disagrees. The conveyor of Cotter et al. is supported only along its angled one end via its frame members. No support is shown or disclosed for its straight end. Thus it may be said to be cantilevered. While it is not supported in cantilevered fashion from one of the lateral sides of the conveyor assembly in the fashion illustrated in Fig. 4 of the present application, it may nonetheless be considered to be cantilevered. Furthermore, while the rollers forming a part of the deck of Cotter et al. are supported at both ends, the overall deck structure formed by the rollers and members 216 and 218 is supported only at one end. There is no requirement in the claims that the rollers be cantilevered and it should be noted that the rollers 60 shown in the Figs. of the present application are supported at both ends. Applicant's comments about the quick change of belts are irrelevant because the quick change of belts is not a claimed limitation.

12. Claims 1-3, 7-9, 12, 20-25, 27-28, 32-34, 37, and 45-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Del Rosso (U.S. Patent No. 4,564,077) in view of Nystrom.

Del Rosso shows a conveyor system having a primary conveyor 70 and a cantilevered conveying belt 10. The primary conveyor can hold a plurality of articles so that it may be said to form an upstream accumulator with a frame, a belt, a pair of opposed rollers, and a motor attached to at least one of the rollers. The cantilevered conveyor has a cantilevered frame that includes a base with a horizontal portion 24,54 and a vertical support wall 20 that forms a lazy L shape with the horizontal portion and a cantilevered deck formed of cross members 23, opposed rollers 12/14, and plate 21 attached to the base. The end portion of the plate 21 of the cantilevered deck adjacent roller 14 has a trapezoidal shape. The rollers support a plurality of belts 15 that are driven by a motor 50 that is attached to the roller 12 through transmission means 51. Thus Del Rosso shows generally all the structure required by the claims except for a belt tension assembly.

Nystrom shows a chain conveyor tension assembly 9 attached to a conveyor deck 1. The assembly includes a roller support 3, a roller support rod 10 for movably connecting the roller support to a deck, a compression spring 17 between the roller support rod and the deck, and a spring adjustment assembly. The spring adjustment assembly includes a first fixed spring stop 14, a second moveable spring stop 10, and an actuator for adjusting the position of the second moveable spring stop. The actuator includes a threaded rod 24, a sliding nut 23, and a spring drive 28 on one end of the threaded bolt. Nystrom teaches that this tensioning device advantageously automatically maintains tension on the conveyor, takes up slack in the conveyor while preventing oscillation of the spring. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tensioning device of Nystrom on the assembly of Del Rosso to maintain tension and take up slack on the conveyor belts 15.

When this is done, the resulting apparatus would have all the structure required by claims 1-3, 7-9, 12, 20-25 (including all the structure required by claims 22-25 if the preamble breathes life into claim 22), 27-28, 32-34, 37, 45-49, and 51.

13. Claims 1-10, 12-13, 20-25, 27-35, 37-38, 45-49, and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotter et al. in view of Nystrom.

The conveyor system disclosed by Cotter et al. includes: **(claims 1, 27)** a cantilevered deck 214 having at least one conveyor belt 230; **(claims 2, 3, 28)** an upstream accumulator 112, 212 including a frame; at least one belt; at least one pair of opposed rollers and a motor; **(claims 4, 29)** an accumulator control system (column 8, line 64 thru column 9, line 27); **(claims 5, 30)** package presence detectors 124; **(claims 6, 31)** the accumulator control system including an interface to the primary conveyor (column 8, line 64 thru column 9, line 27); **(claims 7, 12, 32, 36)** the cantilevered deck including a members 216, 216 and a trapezoidal cantilevered deck comprised of rollers attached to the base 214; **(claims 8, 33)** the base being lazy L-shaped; **(claims 9, 10, 34, 35)** the base including a vertical support wall 216 including a horizontal deck (figure 10); and **(claims 20, 21, 45, 46)** the cantilevered frame including a belt drive 224. Thus Cotter et al. shows generally all the structure required by the claims except for a belt tension assembly.

Nystrom shows a chain conveyor tension assembly 9 attached to a conveyor deck

1. The assembly includes a roller support 3, a roller support rod 10 for movably connecting the roller support to a deck, a compression spring 17 between the roller support rod and the deck, and a spring adjustment assembly. The spring adjustment

assembly includes a first fixed spring stop 14, a second moveable spring stop 10, and an actuator for adjusting the position of the second moveable spring stop. The actuator includes a threaded rod 24, a sliding nut 23, and a spring drive 28 on one end of the threaded bolt. Nystrom teaches that this tensioning device advantageously automatically maintains tension on the conveyor, takes up slack in the conveyor while preventing oscillation of the spring. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tensioning device of Nystrom on the assembly of Del Rosso to maintain tension and take up slack on the conveyor belts 15. When this is done, the resulting apparatus would have all the structure required by claims 1-10, 12-13, 20-25 (including all the structure required by claims 22-25 if the preamble breathes life into claim 22), 27-35, 37-38, 45-49, and 53-54.

Allowable Subject Matter

14. Claims 11, 14-19, 26, 36, and 39-44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

MARK A. DEUBLE
PATENT EXAMINER

